

**Base Document:** OSTA Universal Disk Format Specification  
Revision 1.50

**Date:** December 6, 1998

**Subject:** *Addition to sequentially written file systems*

**Description:**

Sequential File Systems in UDF 1.5 are missing some information that Random-Access File Systems provide: the current volume name and the number of files & directories on the volume. This information is added to the VAT File Entry in an optional Extended Attribute.

**Change:**

Add the following paragraph:

**3.3.4.5.1.3 Logical Volume Extended Information**

The *LVExtensionEA* is stored only in VAT File Entries. It is optional. It shall only be recorded on UDF 1.5 compliant media, not on UDF 2.0 or later (UDF 2.0 already provides a different solution).

This extended attribute shall be stored as an *Implementation Use Extended Attribute* whose *ImplementationIdentifier* shall be set to:

**“\*UDF VAT LVExtension”**

*LVExtensionEA format*

RBP	Length	Name	Contents
0	2	Header Checksum	UInt16
2	8	Verification ID	UInt64
10	4	Number Of Files	UInt32
14	4	Number Of Directories	UInt32
18	128	Logical Volume Identifier	dstring

*Verification ID* – When writing this EA, a copy of the Unique ID field in the VAT ICB's File Entry shall be stored here. When reading, this value helps identifying whether the values in Number Of Files & Directories are accurate: Only when this field is identical to the Unique ID field, those values are valid, otherwise the reader shall assume that the fields are invalid. The values shall only be updated when the Number of Files & Directories is known, otherwise these values shall not be modified or all filled with zero bytes.

*Number Of Files* – Same as in 2.2.6.4

*Number Of Directories* – Same as in 2.2.6.4

*Logical Volume Identifier* – Specifies the current logical volume name as assigned by the user. This name can be different from the L.V.I. in both the LVD and the FSD. When it is different, this value precedes the other values.

**Date:** May 23, 1999

**Subject:** *Correction for “Non-Allocatable Space” file*

**Description:**

Name for sparing file “Non-Allocatable Space” has wrong translation in representation  
(In 2.3.13 in UDF 1.5)

**Change:**

In 2.3.13, replace the text

(#4E,#6F,#6E,#2D,#41,#6C,#6C,#6F,#61,#74,#61,#62,#6C,#65,#20,#70,#61,#63,#65)

with

(#4E,#6F,#6E,#2D,#41,#6C,#6C,#6F,#63,#61,#74,#61,#62,#6C,#65,#20,#53,#70,#61,#63,#65)

**Date:** July 9, 1999

**Subject:** *Correction for processing permissions*

**Description:**

The Attribute and Delete permissions should be changed from Enforce to Ignore for UNIX.

**Change:**

In section 3.3.3.3, replace

Attribute	directory	The file's permissions may be changed.	E	E	E	E	E	E
Attribute	directory	The directory's permissions may be changed.	E	E	E	E	E	E
Delete	file	The file may be deleted.	E	E	E	E	E	E
Delete	directory	The directory may be deleted.	E	E	E	E	E	E

With

Attribute	directory	The file's permissions may be changed.	E	E	E	E	E	I
Attribute	directory	The directory's permissions may be changed.	E	E	E	E	E	I
Delete	file	The file may be deleted.	E	E	E	E	E	I
Delete	directory	The directory may be deleted.	E	E	E	E	E	I